

# **PICK-OFF TRANSFORMER**

P1727

## **Features**

- \* 12.6mm (0.5") seated height
- \* Lead-free (Pb-free)
- \* RoHS compliant
- \* Vacuum encapsulated
- IEC 60950 and UL 60950 certified
- \* UL Recognized Component

# **Applications**

- \* Telecommunications
- \* Pick-off applications
- \* Calling Line Identification
- \* Instrumentation
- Voice Recording

# DESCRIPTION

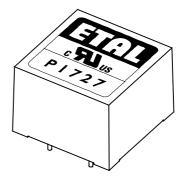
P1727 is a high impedance transformer for applications where high performance and safety isolation to international standards are required in a compact case size.

P1727 has a turns ratio of 2.162:1 giving an impedance transformation of 4.67:1.

P1727 is designed for "listening" applications when placed across a line, presenting a very high impedance to minimize circuit loading.

P1727 is certified to IEC 60950 and UL 60950. P1727 is a UL Recognized Component and is supported by an IEC CB Test Certificate. The part is completely lead-free, compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional processing.







# **SPECIFICATIONS**

#### **Electrical**

At  $T = 25^{\circ}C$  unless otherwise stated.

Parameter	Conditions	Min	Тур	Max	Units
Voltage isolation (1)	50Hz DC	3.88 5.5	- -	- -	kVrms kV
Balance	DC – 5kHz Method TG25	50	-	-	dB
Input impedance	200Hz – 4kHz, Fig 2	12	-	-	kΩ
Operating range: Functional Storage Humidity	Ambient temperature	-25 -40 -	- - -	+85 +125 95	°C °C %R.H.

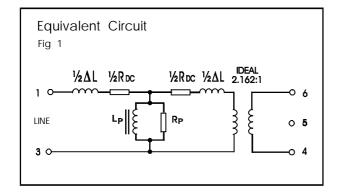
Lumped equivalent circuit parameters as Fig. 1

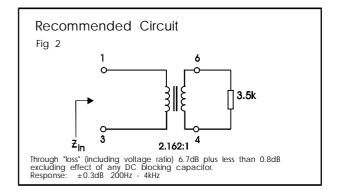
DC resistance, R <sub>DC</sub> (2)	Sum of windings (Corrected for ratio)	-	-	1537	Ω
Leakage inductance ∆L	Refered to pins 1-3	-	-	160	mH
Shunt inductance Lp	10mV 200Hz	22	-	-	Н
Shunt loss Rp	10mV 200Hz	50	-	-	kΩ

#### **Notes**

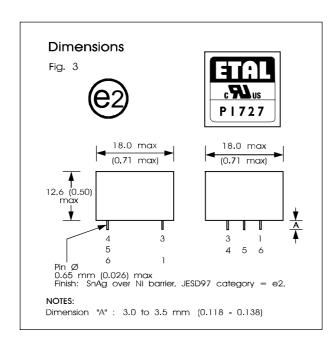
- 1. Components are 100% tested at 6.5kV DC.
- Caution: do not pass DC through windings.
  Telephone line current, etc. must be diverted using choke or semiconductor line hold circuit.

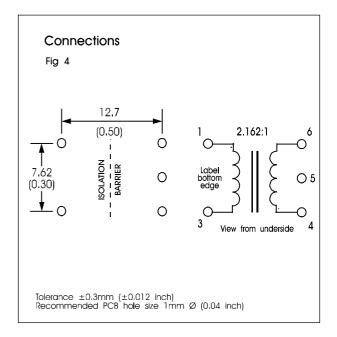






## CONSTRUCTION





Dimensions shown are in millimetres (inches).

Geometric centres of outline and pin grid coincide within a tolerance circle of 0.6mm



## SAFETY\_

Constructed in accordance with IEC 60950-1:2001, EN 60950-1:2001 and UL 60950-1 First Edition, supplementary insulation, 250Vrms maximum working voltage, flammability class V-0.

Distances through solid insulation 0.4mm minimum.

# **CERTIFICATION**

Certified under the IEC CB scheme (Certificate DK-9431) to IEC 60950-1:2001, sub-clauses 1.5, 1.5.1, 1.5.2, 1.7, 1.7.1, 2, 2.9, 2.9.1, 2.9.2, 2.9.3, 2.10, 2.10.1, 2.10.2, 2.10.3, 2.10.3.1, 2.10.3.3, 2.10.4, 2.10.5, 2.10.5.1, 2.10.5.4, 4, 4.7, 4.7.1, 4.7.3, 4.7.3.1, 4.7.3.4, 5, 5.2, 5.2.1, and 5.2.2 for a maximum working voltage of 250Vrms, nominal mains supply voltage not exceeding 300Vrms and a maximum operating temperature of 85°C in Pollution Degree 2 environments, supplementary insulation, including national differences for Denmark, Finland, Germany, Norway, Sweden, Switzerland, USA, Canada and UK.

Recognized under the Component Recognition Program of Underwriters Laboratories Inc. to US and Canadian requirements CAN/CSA C22.2 No. 60950-1-03/UL60950-1, First Edition, based on IEC 60950-1, First Edition, maximum working voltage 250Vrms, Pollution Degree 2, reinforced insulation.

UL File number E203175.

Additionally, Profec Technologies certifies all transformers as providing voltage isolation of 3.88kVrms, 5.5kV DC minimum. All shipments are supported by a certificate of conformity to current applicable safety standards.

## ABSOLUTE MAXIMUM RATINGS

(Ratings of components independent of circuit).

Short term isolation voltage (15s) 4.6kVrms, 6.5kV DC

DC current 100μA

Storage temperature -40°C to

+125°C

Lead temperature, 10s 260°C

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